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Natalia*
**Dominion
Energy®**

NSPS OOOO

October 30, 2018

U.S. MAIL, RETURN RECEIPT REQUESTED
7017 1450 0001 1171 2875

U.S. EPA Region III
Director, Air Protection Division
Mail Code 3WC22
1650 Arch Street
Philadelphia, PA 19103-2029

U.S. MAIL, RETURN RECEIPT REQUESTED
7017 1450 0001 1171 2882

Virginia Department of Environmental Quality
Air Compliance and Permitting Program
Northern Virginia Regional Office
13901 Crown Court
Woodbridge, VA 2193

RECEIVED

NOV 05 2018

Air Protection Division

Re: Dominion Energy Transmission, Inc – Pleasant Valley Compressor Station
NSPS OOOOa - Annual Report

Dear Sirs and/or Madam:

Dominion Energy Transmission, Inc. (DETI) owns and operates the Pleasant Valley Compressor Station, located in Centreville, VA and is subject to 40 CFR, Subpart OOOOa, Standards of Performance for Crude Oil, and Natural Gas Facilities.

In accordance with 40 CFR 60.5420a(b), DETI is submitting the annual report for Pleasant Valley Station covering the time period of August 2, 2017 thru August 1, 2018. The affected facilities at the Pleasant Valley Compressor Station subject to 40 CFR 60, Subpart OOOOa are the collection of fugitive emission components at the compressor station and the electric driven reciprocating compression engines.

This annual report is being submitted according to the requirements specified in §60.5420a (b) and includes the following:

1. Attachment A: Certification by Certifying Official
2. Attachment B: General Site Information

October 30, 2018

Page 2

3. Attachment C: Annual Fugitive Emissions Monitoring Report

4. Attachment D: Reciprocating Compressor Affected Facility Data

If you have any questions regarding this submittal, please contact Sean Warden at (804) 273-3263, or via email at Richard.S.Warden@dominionenergy.com.

Sincerely,

A handwritten signature in blue ink, appearing to read "Richard Gangle", with the letters "foa" written below it.

Richard Gangle
Director, Environmental Services

Enclosures

Attachment A
Certification by Certifying Official

VIRGINIA CERTIFICATE OF DATA ACCURACY

**Annual Report - OOOOa
October 30, 2018
Pleasant Valley Compressor Station**

Company Name: Dominion Energy Transmission, Inc.

Facility Name: Pleasant Valley Compressor Station

**Facility Address: 6309 Bull Run Post Office Road
Centerville, Virginia, 20120**

I, Brian Sheppard, certify under penalty of law that I am a company officer or plant manager or authorized representative of the facility identified above, authorized to make this affidavit. I further certify, as required under 9 VAC 5-20-230 that, based on information and belief formed after reasonable inquiry, the statements and information contained in this document are true, accurate, and complete.

Signature: 

Brian Sheppard
VP, Eastern Pipeline Operations

Date: 10-22-18

Attachment B
General Site Information

Dominion Energy Transmission, Inc.
Pleasant Valley Compressor Station
2018 Annual Report
General Site Information

SITE INFORMATION	Company Name (§60.5420a(b)(1)(i))	Dominion Energy Transmission, Inc.
	Facility Site Name (§60.5420a(b)(1)(i))	Pleasant Valley Station
	Address of Affected Facility (§60.5420a(b)(1)(i))	6309 Bull Run Post Office Road
	City	Centreville
	County	Fairfax
	State Abbreviation	VA
	Zip Code	20120
Identification of Affected Facility(s)	Identification of each affected facility being included in the annual report. (§60.5420a(b)(1)(ii))	1. Collection of fugitive emission components at the compressor station 2. Reciprocating Compressors (Engine 03 & Engine 04)
REPORTING INFORMATION	Beginning Date of Reporting Period. (§60.5420a(b)(1)(iii))	8/2/2017
	Ending Date of Reporting Period. (§60.5420a(b)(1)(iii))	8/1/2018
Certification Official	Name and title of certifying official (§60.5420a(b)(1)(iv))	Brian Sheppard / VP Eastern Pipeline Operations (Certification in Attachment A)

Attachment C

**Annual Fugitive Emissions Monitoring
Report**



LDAR Report

Dominion Energy Transmission, Inc.

Pleasant Valley Compressor Station

Centerville, VA

Annual Report

NSPS Subpart OOOOa

PERIOD: August 2, 2017 to August 1, 2018

Prepared By:

Target Emission Services

800 Town and Country Blvd. (Suite 300)
Houston, Texas, 77024

WWW.TARGETEMISSION.COM

Report Generated on: Aug 06, 2018

SUMMARY



Company:	Dominion Energy Transmission, Inc.		Report:	Annual Fugitive Emissions Monitoring Report	
District:	Eastern		Regulation(s):	NSPS Subpart OOOOa	
Facility Name:	Pleasant Valley Compressor Station		Report Date:	Aug 06, 2018	
GPS Coord.	38 858546	-77 505307	Period:	2017-Aug-02	2018-Aug-01
This report satisfies the requirements of 40 CFR §60.5420a(b)(7) for the collection of fugitive emissions components at the above referenced compressor station.					
Information required to be reported per §60.5420a(b)(7)(i) - (vi)					
Monitoring Quarter	1	2	3	4	
Survey Start Date/Time	09/25/2017 7:00 AM	12/07/2017 7:00 AM	02/05/2018 8:00 AM	04/03/2018 2:07 PM	
Survey End Date/Time	09/25/2017 12:00 PM	12/07/2017 4:00 PM	02/05/2018 12:00 PM	04/03/2018 4:08 PM	
OGI Technician <small>(see Appendix for OGI Technician Training and Experience)</small>	Terence Treflak	Mark Sangil	Nathan Hill	Jeremy Smith	
Ambient Temp. (°F)	85	40	28	45	
Sky Conditions	Mostly Sunny, 1%-10% sky is clouds	Clear, No clouds	Mostly Sunny, 1%-10% sky is clouds	Overcast, >90% of the sky is covered by clouds	
Max. Wind Speed (MPH)	4	3	16	5	
LDAR Instrument	Optical Gas Imaging/GFX-320	Optical Gas Imaging/GFX-320	Optical Gas Imaging/GFX-320	Optical Gas Imaging/GFX-320	
§60.5420a(b)(7)(vi) Deviations from Monitoring Plan	No deviations from the Monitoring Plan	No deviations from the Monitoring Plan	No deviations from the Monitoring Plan	No deviations from the Monitoring Plan	
Deviation(s) Explanation	N/A	N/A	N/A	N/A	
§60.5420a(b)(7)(vii) - Number and type of components for which fugitive emissions were detected					
Valves		3	4	2	
Connectors	11	5		10	
Pressure Relief Devices					
Open-Ended Lines					
Flanges				2	
Compressors					
Instruments					
Meters					
Other			2	1	
Total No. of Leaks Detected	11	8	6	15	
§60.5420a(b)(7)(viii) - Number and type of fugitive emissions components that were not repaired as required in §60.5397a(h)					
Valves					
Connectors					
Pressure Relief Devices					
Open-Ended Lines					
Flanges					
Compressors					
Instruments					
Meters					
Other					
§60.5420a(b)(7)(ix) - Number and type of difficult-to-monitor and unsafe-to-monitor fugitive emission components monitored					
Valves					
Connectors					
Pressure Relief Devices					
Open-Ended Lines					
Flanges					
Compressors					
Instruments					
Meters					
Other					
§60.5420a(b)(7)(x) - Date of successful repair of the fugitive emission component (see Repair List).					
§60.5420a(b)(7)(xi) - Number and type of fugitive emission components placed on delay of repair and explanation for each delay of repair (see DOR List).					
§60.5420a(b)(7)(xii) - Type of instrument used to resurvey a repaired fugitive emissions component that could not be repaired during the initial fugitive emissions finding (see Repair List).					

Fugitive Emissions Components Placed on DOR				
This summary satisfies the annual reporting requirements of §60.5420a(b)(7)(xi), "number and type of fugitive emission components placed on delay of repair and explanation for each delay of repair".				
Component				
Quarter	Q1	Q2	Q3	Q4
Valves				
Connectors				
Pressure Relief Devices				
Open-Ended Lines				
Flanges				
Compressors				
Instruments				
Meters				
Other				
Total No. of Leaks on DOR	0			
Date Surveyed	Emission ID #	Component Type	Current Repair Status	Delay of Repair Explanation / Justification

Fugitive Emissions Components Repaired During Reporting Period

This summary satisfies the annual reporting requirements of §60.5420a(b)(7)(x), "date of successful repair of the fugitive emission component" and §60.5420a(b)(7)(xii), "type of instrument used to resurvey a repaired fugitive emissions component that could not be repaired during the initial fugitive emissions finding".

Date Surveyed	Emission ID #	Date of Successful Repair	Repair Confirmation Method / Instrument
2017-09-25	84000003	2017-Sep-25	Optical Gas Imaging
2017-09-25	84000005	2017-Sep-25	Optical Gas Imaging
2017-09-25	84000006	2017-Sep-25	Optical Gas Imaging
2017-09-25	84000008	2017-Sep-25	Optical Gas Imaging
2017-09-25	84000009	2017-Sep-25	Optical Gas Imaging
2017-09-25	84000010	2017-Sep-25	Optical Gas Imaging
2017-09-25	84000011	2017-Sep-25	Optical Gas Imaging
2017-09-25	84000004	2017-Sep-26	Bubble Test
2017-09-25	84000007	2017-Sep-26	Bubble Test
2017-09-25	84000001	2017-Oct-17	Bubble Test
2017-09-25	84000002	2017-Oct-17	Bubble Test
2017-12-07	75056635	2017-Dec-18	Bubble Test
2017-12-07	75056636	2017-Dec-18	Bubble Test
2017-12-07	75056639	2017-Dec-18	Bubble Test
2017-12-07	75056632	2017-Dec-19	Bubble Test
2017-12-07	75056633	2018-Jan-03	Bubble Test
2017-12-07	75056634	2018-Jan-03	Bubble Test
2017-12-07	75056637	2018-Jan-03	Bubble Test
2017-12-07	75056638	2018-Jan-03	Bubble Test
2018-02-05	17810043	2018-Feb-09	Bubble Test
2018-02-05	17810044	2018-Feb-09	Bubble Test
2018-02-05	17810040	2018-Feb-13	Bubble Test
2018-02-05	17810041	2018-Feb-13	Bubble Test
2018-02-05	17810042	2018-Feb-13	Bubble Test
2018-02-05	17810039	2018-Feb-20	Bubble Test
2018-04-03	19110485	2018-Apr-13	Bubble Test
2018-04-03	19110488	2018-Apr-13	Bubble Test
2018-04-03	19110491	2018-Apr-13	Bubble Test
2018-04-03	19110494	2018-Apr-15	Bubble Test
2018-04-03	19110495	2018-Apr-15	Bubble Test
2018-04-03	19110499	2018-Apr-19	Bubble Test
2018-04-03	19110486	2018-Apr-20	Bubble Test
2018-04-03	19110487	2018-Apr-20	Bubble Test
2018-04-03	19110493	2018-Apr-20	Bubble Test
2018-04-03	19110496	2018-Apr-23	Bubble Test
2018-04-03	19110497	2018-Apr-23	Bubble Test
2018-04-03	19110490	2018-Apr-25	Bubble Test

REPAIR LIST



2018-04-03	19110500	2018-Apr-26	Bubble Test
2018-04-03	19110489	2018-Apr-27	Bubble Test
2018-04-03	19110492	2018-Apr-27	Bubble Test

OGI Technician Training and Experience

Monitoring surveys are performed by personnel that are trained in the proper operation of the OGIC (Optical Gas Imaging Camera) to be used in the monitoring survey and that have prior experience using OGICs for the purposes of identifying fugitive emissions. Additionally, monitoring personnel are familiar with the types of equipment located at a natural gas compressor station. All monitoring personnel review each site specific monitoring plan prior to performing monitoring surveys at the Facility.

All Monitoring Technicians follow a protocol containing technical procedures, training requirements, and individual and team performance audits. This protocol ensures that each crew member follows a prescriptive training program. The training program includes minimum required field times for each module. Each module uses both written testing and on-site work performance audits to evaluate the crew member on their work performance.

Each crew member must successfully complete their training modules to be allowed to work as a member of the main field crew. The protocol also includes an audit program to evaluate work performance on an on-going basis. This system ensures that each crew member is adhering to the procedures and guidelines of the protocol.

Each monitoring technician:

- 1) holds a strong knowledge of oil and gas operations and has a detailed understanding of the various processes that are involved in the transportation and processing on natural gas.
- 2) is trained (certified) and experienced in the use of fugitive emission detection and measurement equipment;
- 3) has a minimum of 1000 hours of experience on the use of optical gas imaging, ultrasonic leak detection and emission flow rate measurement
- 4) maintains required safety training and strong understanding of applicable TARGET Safe Operating Procedures; and
- 5) received performance audits to ensure compliance to our prescriptive fugitive emission assessment protocol

The protocol contains technical procedures, training requirements, and individual and team performance audits. The purpose of our assessment protocol is to:

- 1) Maintain a high degree of Quality Control;
- 2) Ensure that all sources of fugitive emissions are identified;
- 3) Ensure that all source data is consistently recorded to provide reliable and effective emission reduction recommendations.

This protocol eliminates the common problems and barriers that cause many programs to fail. Our staff are trained and audited to avoid many of the common fugitive emission program problems. Some of these common problems include:

- Inexperienced with camera use and the concepts of infrared thermography
- Not using multiple camera angles
- Constantly moving the camera from scene to scene without pausing in each view to look for gas images
- Many leaks are missed by relying solely on the automatic mode (manual mode can be more effective in certain situations)
- Scanning too fast and missing components

Accurate data collection and entry is crucial to maintaining an effective Fugitive Emission Management Program. The data management protocol includes a data QA/QC review process that contains three levels of evaluation:

- 1) Technician Self Check – at the end of each assessment the technician must review each emission entry to locate and remediate any data inconsistencies
- 2) Team Lead Review – at the end of each work day the Team Lead will run a QA/QC evaluation on each assessment and emission to ensure that data has been entered following the TARGET Protocol.
- 3) Project Manager Evaluation – on a weekly basis the project manager will run all emission data through a QA/QC data evaluation to detect and eliminate any inconsistencies.

OGI Technician Training and Experience

Survey Date	OGI Technician	Certification Date	Months of OGI Experience
2017-Sep-25	Terence Trefiak	2007-Jul-01	123
2017-Dec-07	Mark Sangil	2015-Nov-12	26
2018-Feb-05	Nathan Hill	2017-Aug-07	7
2018-Apr-03	Jeremy Smith	2017-Apr-28	13

SUMMARY



Company:	Dominion Energy Transmission, Inc.		Report:	Annual Fugitive Emissions Monitoring Report	
District:	Eastern		Regulation(s):	NSPS Subpart OOOOa	
Facility Name:	Pleasant Valley Compressor Station		Report Date:	Aug 21, 2018	
GPS Coord.	38.858546	-77.505307	Period:	2017-Aug-02	2018-Aug-01

This report satisfies the requirements of 40 CFR §60.5420a(b)(7) for the collection of fugitive emissions components at the above referenced compressor station.

Information required to be reported per §60.5420a(b)(7)(i) - (vi)				
Monitoring Quarter	5	NOTE - due to timing of the surveys, five were conducted.		
Survey Start Date/Time	07/19/2018 10:00 AM			
Survey End Date/Time	07/19/2018 3:30 PM			
OGI Technician <small>(see Appendix for OGI Technician Training and Experience)</small>	Andrew Sheffler			
Ambient Temp. (°F)	75			
Sky Conditions	Clear, No clouds			
Max. Wind Speed (MPH)	2			
LDAR Instrument	Optical Gas Imaging/GFX-320			
§60.5420a(b)(7)(vi) Deviations from Monitoring Plan	No deviations from the Monitoring Plan			
Deviation(s) Explanation	N/A			
§60.5420a(b)(7)(vii) - Number and type of components for which fugitive emissions were detected				
Valves	4			
Connectors	15			
Pressure Relief Devices				
Open-Ended Lines				
Flanges				
Compressors				
Instruments				
Meters				
Other	1			
Total No. of Leaks Detected	20			
§60.5420a(b)(7)(viii) - Number and type of fugitive emissions components that were not repaired as required in §60.5397a(h)				
Valves				
Connectors				
Pressure Relief Devices				
Open-Ended Lines				
Flanges				
Compressors				
Instruments				
Meters				
Other				
§60.5420a(b)(7)(ix) - Number and type of difficult-to-monitor and unsafe-to-monitor fugitive emission components monitored				
Valves				
Connectors				
Pressure Relief Devices				
Open-Ended Lines				
Flanges				
Compressors				
Instruments				
Meters				
Other				
§60.5420a(b)(7)(x) - Date of successful repair of the fugitive emission component (see Repair List).				
§60.5420a(b)(7)(xi) - Number and type of fugitive emission components placed on delay of repair and explanation for each delay of repair (see DOR List).				
§60.5420a(b)(7)(xii) - Type of instrument used to resurvey a repaired fugitive emissions component that could not be repaired during the initial fugitive emissions finding (see Repair List).				

Fugitive Emissions Components Placed on DOR

This summary satisfies the annual reporting requirements of §60.5420a(b)(7)(xi), "number and type of fugitive emission components placed on delay of repair and explanation for each delay of repair".

Component				
Quarter	Q5			
Valves				
Connectors				
Pressure Relief Devices				
Open-Ended Lines				
Flanges				
Compressors				
Instruments				
Meters				
Other				
Total No. of Leaks on DOR	0			
Date Surveyed	Emission ID #	Component Type	Current Repair Status	Delay of Repair Explanation / Justification

Fugitive Emissions Components Repaired During Reporting Period

This summary satisfies the annual reporting requirements of §60.5420a(b)(7)(x), "date of successful repair of the fugitive emission component" and §60.5420a(b)(7)(xii), "type of instrument used to resurvey a repaired fugitive emissions component that could not be repaired during the initial fugitive emissions finding".

Date Surveyed	Emission ID #	Date of Successful Repair	Repair Confirmation Method / Instrument
2018-07-19	25510167	2018-Jul-22	Bubble Test
2018-07-19	25510168	2018-Jul-22	Bubble Test
2018-07-19	25510169	2018-Jul-22	Bubble Test
2018-07-19	25510181	2018-Jul-22	Bubble Test
2018-07-19	25510166	2018-Aug-03	Bubble Test
2018-07-19	25510171	2018-Aug-03	Bubble Test
2018-07-19	25510172	2018-Aug-03	Bubble Test
2018-07-19	25510173	2018-Aug-03	Bubble Test
2018-07-19	25510174	2018-Aug-03	Bubble Test
2018-07-19	25510180	2018-Aug-06	Bubble Test
2018-07-19	25510164	2018-Aug-10	Bubble Test
2018-07-19	25510165	2018-Aug-10	Bubble Test
2018-07-19	25510175	2018-Aug-10	Bubble Test
2018-07-19	25510176	2018-Aug-10	Bubble Test
2018-07-19	25510178	2018-Aug-10	Bubble Test
2018-07-19	25510179	2018-Aug-10	Bubble Test
2018-07-19	25510183	2018-Aug-10	Bubble Test
2018-07-19	25510182	2018-Aug-14	Bubble Test
2018-07-19	25510170	2018-Aug-15	Bubble Test
2018-07-19	25510177	2018-Aug-16	Bubble Test

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OGI Technician Training and Experience

Survey Date	OGI Technician	Certification Date	Months of OGI Experience
2018-Jul-19	Andrew Sheffler	2017-Sep-05	11

Attachment D

Reciprocating Compressors

Dominion Energy Transmission, Inc.
Pleasant Valley Compressor Station
2018 Annual Report
Reciprocating Compressors

Compressor ID (§60.5420a(b)(1)(ii))	Engine 03	Engine 04
Initial Startup of Reciprocating Compressor	5/8/2016	2/7/2017
Are emissions from the rod packing unit being routed to a process through a closed vent system under negative pressure? (§60.5420a(b)(4)(i))	No	No
If emissions are not routed to a process through a closed vent system under negative pressure, what are the cumulative number of hours or months of operation since initial startup or the previous rod packing replacement (whichever is later)? (§60.5420a(b)(4)(i))	1979.9	2269.7
Units of Time Measurement (§60.5420a(b)(4)(i))	Hours	Hours
Deviations where the reciprocating compressor was not operated in compliance with requirements (§60.5420(b)(4)(ii) and §60.5420a(c)(3)(iii))	None	None